

Notice of Allowability

Application No.

10/618,595

Examiner

Eric W. Thomas

Applicant(s)

MIDO ET AL.

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the paper filed 12/30/03.
2. ☒ The allowed claim(s) is/are 1-51.
3. ☒ The drawings filed on 15 July 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

ERIC W. THOMAS
PRIMARY EXAMINER

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Charles Watts on 3/16/05.

The application has been amended as follows:

Claim 41 line 13, change "filing" to ~~filling~~.

Claim 46, line 1, change "42" to ~~44~~.

Claim 46, line 2, change "electrodes" to ~~electrode~~.

1. The following is an examiner's statement of reasons for allowance: The prior art does not teach or fairly suggest (taken in combination with the other claimed features) a solid electrolytic capacitor comprising an insulation portion penetrating a portion of said valve metal sheet where said dielectric layer, said solid electrolyte layer, and said collector layer are not provided (claims 1-30); a solid electrolytic capacitor comprising a penetration electrode penetrating said package in a direction from said first side to said second side of said valve metal sheet (claims 31-40); a method of manufacturing a solid electrolytic capacitor comprising the step of forming a through-hole electrode exposed to a second side of the valve metal sheet in the first penetration hole, the through-hole electrode being connected to the collector layer; forming an electrode terminal exposed to the second side of the valve metal sheet the electrode terminal being connected to

Art Unit: 2831

the valve metal (claims 41-43); a method of manufacturing a solid electrolytic capacitor comprising the step of forming a first insulating portion by filling the ~~blind~~ ^{blind} hole with insulating material; forming an electrode terminal exposed in a direction of the first side of the valve metal sheet and connected to the valve metal sheet; forming a via electrode exposed in the direction of the first side of the valve metal sheet in the first insulating portion and connected to the collector layer (claims 44-47); and a method of manufacturing a solid electrolytic capacitor comprising the step of forming a package covering a side surface of the valve metal sheet; and forming a penetration electrode penetrating the package (claims 48-51).

- ET 3/18/05

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6,510,045 – a solid electrolytic capacitor having vias.

6,775,126 – a solid electrolytic capacitor having conductive terminals extending in a valve metal sheet.

6,785,147 – a solid electrolytic capacitor within a circuit module.

6,822,849 – a solid electrolytic capacitor having conductive vias extending through a valve metal foil.

Art Unit: 2831

6,852,137 – discloses a method for manufacturing a solid electrolytic capacitor.

6,855,177 – discloses a method form producing a solid electrolytic capacitor.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric W. Thomas whose telephone number is 571-272-1985. The examiner can normally be reached on Monday - Friday 5:30 AM - 2:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-1984. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 3/17/05
ERIC W. THOMAS
PRIMARY EXAMINER

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